

IVANOV, N.F.; KUZNETSOV, V.S.; SOLNYSHKOV, A.I.

Formation of pulse ion beams carrying current of the order of
hundreds of milliamperes in direct-acting accelerators.
Elektrofiz. app. no. 2:169-178 '64. (MIRA 18:3)

IVANOV, N.F.; SIVKOV, Yu.P.; SOLNYSHKOV, A.I.

Measuring the phase volume of the ion beam from the injector
of a linear accelerator. Prib. i tekhn.eksp. 10 no.5:30-34
(MIRA 19:1)
S-0 '65.

1. Nauchno-issledovatel'skiy institut elektrofizicheskoy
apparatury Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy
energii SSSR, Leningrad.

L 28040-66 EWT(m) IJP(c)

ACC NR: AP5027003

SOURCE CODE: UR/0120/65/000/005/0030/0034

AUTHOR: Ivanov, N. F.; Sivkov, Yu. P.; Solnyshkov, A. I.

ORG: Scientific Research Institute of Electrophysics Equipment of GKAE,
Leningrad (Nauchno-issledovatel'skiy institut elektrofizicheskoy
apparatury GKAE)

TITLE: Measurement of phase space of the ion beam in the injector of a
linear accelerator

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1965, 30-34

TOPIC TAGS: linear accelerator, proton beam

ABSTRACT: The phase space was measured for an axisymmetric proton beam having an energy of 500 to 600 kev and a current of the order of hundreds of milliamperes. The distribution of the beam density in the phase space was reproduced on photographic film. Calculations of the beam parameters in the four-dimensional phase space was made in cylindrical coordinates. An equation was derived for the ellipsoidal phase space. The measurements were conducted by using a device similar to that described by L. E. Collins and P. T. Strout in Nucl. Instum. and Methods, 1964, 26, 157. However, the device used by the authors was provided with a photo-recording camera placed at 30 cm from the 0.06 mm

UDC: 621.384.6.01

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ACC NR: AP5027003

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slits of two diaphragms. The device was shown in a photo and its action was explained. A MF-4 microphotometer was used for determining the density distribution recorded by the film. Then, the experimental data were analyzed and the results calculated. An example of the beam density distribution in a transverse phase space was mapped out in a diagram. The results obtained under different conditions and at the currents varying from 350 to 480 ma were summarized in a table. The current characteristics were plotted for four-and two-dimensional phase spaces and for seven various operating conditions. The analysis of curves showed that, in accordance with Liouville's Theorem, the focussing voltage produced no effect upon the phase space. The dependence of the current on the two-dimensional phase space was more expressive. The highest current density obtained at 400 ma was equal to 120 ma/cm²/rad. The thanks were expressed to I. M. Kapchinckiy and V. A. Batalin for the discussion of the results obtained in the experiments. Orig. art. has: 5 figures and 9 formulas.

SUB CODE: 18 / SUBM DATE: 11Aug64 / ORIG REF: 002 / OTH REF: 004

Card 2/2 C

L 0/199-c/ EWI(i)/EWI(m) IJF(s) AF

ACC NR: AT6031752

SOURCE CODE: UR/3092/66/000/004/0003/0022

AUTHOR: Ivanov, N. F.; Sivkov, Yu. P.; Solnyshkov, A. I.

48
44

B41

ORG: none

TITLE: Characteristics of the ion beam produced by the injector of a linear accelerator

19

SOURCE: Moscow. Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury. Elektrofizicheskaya apparatura, no. 4, 1966, 3-22

TOPIC TAGS: ion beam, linear accelerator, plasmatron, preinjector

ABSTRACT: The structure of a beam of ions with an energy of 500-700 kev obtained at the output of the proton-synchrocyclotron preinjector was investigated. The beam is designed for injection into a linear accelerator and for this reason the density distribution of ions over the phase space is the most important characteristic of the beam. Essentially, it determines the value of the current which can be captured by the linear accelerator. The transverse phase volume and the magnitude of the current were determined at a distance of approximately 1 meter from the output end of the focusing arrangement used in the linear accelerator. A proton source of the duoplasmatron type and the injector optics make it possible to obtain the crossover of the beam at this point when the maximum current is 500 ma, thereby providing for the op-

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L 07199-67

ACC NR: AT6031752

timum operation of the focusing arrangement. The requirements imposed on the phase volume of the beam injector are studied analytically. In the experimental part of the work, the phase volume was measured by means of equipment similar to that described by Collins and Stroud (1964). The only difference in the measurement technique was that the beam was recorded on photographic film and the photometry of the film image made it possible to establish the density distribution in phase space. The theoretical basis for the method used to process the measurement result is discussed. Two-dimensional and four-dimensional phase volumes occupied by a beam with density n , greater than some assigned value, and the portion of the total beam current contained in this phase volume are computed. Graphs are presented showing the distribution of beam density, maximum values of image edge projection coordinates, projection of four-dimensional phase volume, variation in the beam current, distribution of beam density and distribution of ion density. The authors thank S. A. Alekseyev for assistance in analyzing the results of the experiment and V. A. Malukhin for assisting in the preparation of the measurement devices and in conducting the experiments. The authors also acknowledge discussions with I. M. Kapchinskiy and V. A. Batalin which in good measure facilitated the proper interpretation of the results. Orig. art. has: 15 figures, 2 tables.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 007

Card 2/2 ecp

L 59241-65 EWT(m)/EPA(w)-2/EWA(m)-2 Pt-7 IJP(c) GS

ACCESSION NR: AT5007937

S/0000/84/000/010/c507/05.2

59

AUTHOR: Abroyan, M. A.; Gerasimov, V. P.; Zhelezников, F. G.; Zubotskaya, G. R.;
Ivanov, N. F.; Ivlev, A. V.; Komarov, V. L.; Kuznetsov, V. S.; Matmanizov, G. H.;
Royfe, I. H.; Solnyshkov, A. I.

TITLE: High-current injector of a linear accelerator with strong focusing

19

SOURCE: International Conference on High-Energy Accelerators. Dzhina, 1963. Trudy.
Moscow, Atomizdat, 1964, 507-512

TOPIC TAGS: linear accelerator, strong focusing accelerator, electron optics

ABSTRACT: Conditions governing injection in linear proton accelerators determined the requirements on the ion beam, which were of the following order: energy, 700 kev; beam current, 400 milliamperes; beam diameter, 10 millimeters; pulse duration, 10-15 microseconds; energy stability, 0.5%; angular divergence, $\pm 5 \cdot 10^{-3}$ radian. The principal difficulties occur in the development of a system for producing and forming an ion beam with a large current from a powerful stabilized high-voltage source. For particle energy of 700 kev, a variation of the open machine is chosen which ensures good operational characteristics. In the case of large currents, the effect of the beam's spatial charge is substantial and must be taken into account. It

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ACCESSION NR: AT5007937

considerably complicates the design of the ion-optical system. Experimental testing of the selected version of the optical system for a proton beam with a current of the order of 0.5 ampere confirmed the correctness of the theoretical conclusions and indicated the possibility of producing a proton injector with the above parameters. The author discusses the following topics: design of a system for forming the beam; the experimental setup (injector power supply, high-voltage stabilized power supply circuit, ion source, and current characteristics); the results of the measurements (e.g. current density distribution over tube cross-section). "In conclusion, the author thanks I. F. Malyshov for his constant interest and cooperation during the work, and also R. P. Zaytseva for doing the computer calculations." Orig. art. has: 8 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury imeni D. V. Yefremova GKAE SSSR (Scientific-Research Institute of Electrophysical Equipment, GKAE SSSR)

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"APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000619110012-0

L 59241-65

ACCESSION NR: AT5007937

SUBMITTED: 26May64

ENCL: 00

SUB CODE: NP

NO REF Sov: 003

OTHER: 002

Card 3/3

APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000619110012-0"

SAKSONOV, Grigoriy Mikhaylovich; KOROLEV, A.A., prof., red.;
IVANOV, N.F., red.; KIRICHENKO, L.V., red.-leksik.;
PLAKSHE, L.Yu., tekhn. red.

[English-Russian dictionary on metal rolling] Anglo-
russkii slovar' po prokatke metallov. Moskva, Glav. red.
inostr. nauchno-tekhn. slovarei Fizmatgiza, 1963. 181 p.
(MIRA 17:2)

MAKAROV, A.F.; OBOROTOV, I.Ye.; KALYADIN, I.I.; FELENKO, L.I.; PEREPELITSA, V.R.; NECHAYEV, B.N.; DAVYDOV, A.M.; IVANOV, N.G.; CHUVAKOV, P.F.; FIL'KOV, P.V.; LAR'KIN, G.D.; SVYATKIN, V.V.; SHARIFULLIN, M.

Railroad workers address metallurgists. Put' i put.khoz. 4
no.8:14 Ag '60. (MIRA 13:8)

1. Kovylkinskaya distantsiya puti i putesvaya mashinnyava stantsiya No.66, stantsiya Kovylkino, Kuybyshevskoy dorogi. 2. Nachal'nik Kovylkinskoy distantsii puti (for Makarov). 3. Sekretari partbyuro, stantsiya Kovylkino, Kuybyshevskoy dorogi (for Oborotov, Nechayev). 4. Predsedatel' mestkoma, stantsiya Kovylkino, Kuybyshevskoy dorogi (for Kalyadin). 5. Sekretari Vsesoyuznogo Leninskogo kommunisticheskogo soyuza molodezhi, stantsiya Kovylkino, Kuybyshevskoy dorogi (for Felenko, Ivanov). 6. Nachal'nik putevoy mashinnoy stantsii No.66, stantsiya Kovylkino, kuybyshevskoy dorogi (for Perepelitsa). 7. Chlen mestkoma, stantsiya Kovylkino, Kuybyshevskoy dorogy (for Davydov). 8. Rukovoditeli brigad i udarniki kommunisticheskogo truda distantsii i putevoy mashinnoy stantsii No.66, stantsiy Kovylkino, Kuybyshevskoy dorogi (for Chuvakov, Fil'kov, Lar'kin, Svyatkin, Sharifullin).

(Railroads--Rails)

IVANOV, N. G., polkovnik meditsinskoy sluzhby, dotsent

Some problems in the organization of sorting and therapeutic
aid in the stages of medical evacuation. Voen.-med. zhur. no.12:
7-11 D '61. (MIRA 15:7)

(MEDICINE, MILITARY)

MIKHAILOV, M.K.; IVANOV, N.G.

On changes in flavonoid composition of fresh tobacco during manipulation. Doklady BAN 14 no.4:357-360 '61.

1. Central Tobacco Research Laboratory Bulgartabak, Plovdiv.
Submitted by Academician D. Ivanov.

IVANOV, N.

Method for a rapid quantitative determination of alkaloids in
fresh tobacco leaves. Doklady BAN 15 no.7:735-738 '62.

1. Chlen Redaktsionnoy kollegii, "Doklady Bolgarskoy Akademii
nauk". Submitted by Academician D. Ivanoff [Ivanov, D.].

IVANOV, N.; GYUZELEV, M. [Giuzelev, L.]; BONEVA, A.

Objective indices on tobacco combustibility. Doklady BAN 16
no.1:77-80 '63.

1. Submitted by Academician D. Ivanov.

IV. Chemical Toxicology, R.D.

Toxicological characteristics of methylmethacrylate as a new heat carrier. Toks. anal. pri. chum. vospich. no. 011-72 164.
(MIRA 18:4)

IVANOV, N.G.

Toxicological characteristics of dicumylmethane. Toks. nov.
prom. khim. vedom. no.6174-81 '64. (MJRA 18:4)

KURZAYEV, G.M., mladshiy nauchnyy sotrudnik; IVANOV, N.G.

Trichlorometaphos-? in controlling warble fly infestation of
reindeer. Veterinariia 41 no.2:45-46 F '65.

(MIRA 18:3)

1. Sibirskiy nauchno-issledovatel'skiy veterinarnyy institut
(for Kurzayev). 2. Glavnyy zootehnik kolkhoza "Put' Lenina",
Magadanskoy oblasti (for Ivanov).

IVANOV, N.G., polkovnik meditsinskoy sluzhby, dotsent; LOBANOV, G.P.,
polkovnik meditsinskoy sluzhby, dotsent

Principles of medical screening at the regimental medical
station and at the medicosanitary battalion. Voen.-med.
zhur. no.2:17-25 '65. (MIRA 18:11)

IVANOV, N.G., kontr- admiral; AKHMYLOVSKIY, I.Ye., kapitlar 2-go ranga

For close cooperation of navigators and hydrographers. Mor.
sbor. 48 no.7;59-61 fl '65. (MIRA 18:8)

PEKSHEV, Yu.A.; LENSKIY, B.V.; AVSENOV, Yu.M.; MIL'ONOV, V.S.; KISVYANTSEV, L.A.; TELEGIN, Ya.I.; POTAPOV, V.I.; NETRUSOV, A.A.; ZYKOV, A.A.; KUDIN, B.M.; MAKSIMOVA, A.P.; NIKOLAYENKO, Zh.I.; VOLKOV, N.V.; SHVETSOV, N.I.; PLAKSIN, S.V.; POPOV, N.N.; KARSHINOV, L.N.; YAKIMOVA, T.A.; SHALASHOV, V.P.; VISYANIN, Yu.L.; KRASNOM, L.V.; PUSENKOV, N.N.; IVANOV, N.I., red.; ZOLOTAREV, V.I., red.; SLADKOVSKIY, M.I., red.; LEPNIKOVA, Ye., red.; KOROLEVA, A., mladshiy red.; NOGINA, N., tekhn. red.

[Economic development of the people's democracies; survey for 1959]
Razvitiye ekonomiki stran narodnoi demokratii; obzor za 1959 god. Pod
red. N.I. Ivanova i dr. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1960.
305 p. (MIRA 14:6)

1. Moscow. Nauchno-issledovatel'skiy kon'yukturnyy institut.
(Europe, Eastern—Economic conditions)

BARYSHOK, G.I., IL'IN, F.N.; Ivanov, N.I., kandidat ekonomicheskikh naук.

On the possible elimination of short hauls on the Stalino Railroad line. Zhel.dor.transp. 37 no.1:68-70 Ja '56. (MLRA 9:3)

1. Zamestitel' nachal'nika kommercheskoy sluzhby dorogi (for Baryshok); 2. Nachal'nik otdela planirovaniya perevosok (for Il'in)
(Railroads--Management)

DUBOVA, T.N., kand.tekhn.nauk; KOGAN, Yu.A., inzh.; IVANOV, N.I., inzh.

New design of hoses for semiautomatic welding machines.
Svar. proizv. no.9:32 S '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrosvarochnogo
oborudovaniya (for Dubova, Kogan). 2. Leningradskiy
staleprokatnyy zavod (for Ivanov).
(Electric welding—Equipment and supplies)

AKULOV, Ye.F., red.; IVANOV, N.I., red.; KIREYEV, M.I., red.; KNYAZEV, P.I., red.; CHICHILO, I.K., red.; ZHITNIKOVA, O.S., tekhn.red.

[Regulations for the technical operation and safe maintenance of electric installations in industrial enterprises; compulsory for industrial enterprises of economic councils ministries and departments] Pravila tekhnicheskoi ekspluatatsii i bezopasnosti obsluzhivaniia elektrostanovok promyshlennykh predpriiatii; obiazatel'nye dlia promyshlennykh predpriatii sovnarkhozov, ministerstv i vedomstv. Izd.2., stereotipnoe. Utverzhdeny 10 fevralia 1961 g. Moskva, Gosenergoizdat, 1962. 267 p. (MIRA 15:7)

1. Russia (1923- U.S.S.R.) Glavnaya energeticheskaya upravleniya.
(Electric engineering--Safety regulations)

CHUMAKOV, N.M., red.; KIREYEV, M.I., red.; AKULOV, Ye.F., red.;
IVANOV, N.I., red.; KNYAZEV, P.I., red.; CHICHILIO, I.K.,
red.; KIREYEV, M.I., red..

[Safety engineering regulations for operating and servicing
electrical systems of industrial enterprises; mandatory for
industrial enterprises, economic councils, ministries, and
departments] Pravila tekhnicheskoi ekspluatatsii i bezopas-
nosti obsluzhivaniia elektroustanovok promyshlennyykh pred-
priiatii; obiazatel'nye dlja promyshlennyykh predpriatii, sov-
narkhozov, ministerstv i vedomstv. Utverzhdeny 10 fevralia 1961 g.
Moskva, Metallurgizdat, 1962. 360 p. (MIRA 15:10)

1. Russia (1923- U.S.S.R.) Glavnoye energeticheskoye upravleniye.
(Electric power distribution--Safety regulations)

VECHER, Nikolay Aleksandrovich; IVANOV, N.I., retsenzent; KULAKOV,
A.M., retsenzent; LEPINSKIKH, B.M., red.; BAS'YAS, I.P.,
red.; MIKHAYLIKOV, S.V., red.; TELEGIN, A.S., red.;
BUR'KOV, M.M., red.izd-va; ISLENT'YEVA, P.G., tekhn. red.

[Highly efficient open-hearth furnace performance] Vysoko-
proizvoditel'naia rabota martenovskikh pechei. Moskva,
Metallurgizdat 1963. 270 p. (MIRA 16:8)
(Open-hearth furnaces)

IVANOV, N.I.

Sugar beet seeds are grown near Leningrad. Biol. v shkole no.4:
54 Jl-Ag '63. (MIRA 16:9)

1. Leningradskaya oblastnaya stantsiya yunykh naturalistov.
(Leningrad Province--Sugar beet breeding)

GRITSAY, Aleksandr Petrovich; IVANOV, Nil Ivanovich; CHIBISOV,
Vasiliy Dmitriyevich; NOVIKOVA, I.Ye., red.; CARINA, T.D.,
tekhn. red.

[Working capital of socialist industrial enterprises] Obo-
rotnye sredstva sotsialisticheskikh promyshlennnykh predpri-
iatii. Moskva, Vysshiaia shkola, 1963. 84 p. (MIRA 16:10)
(Capital)

YANOV, N.E.

✓ B.S.-70
Ivanov, N. I., 25th Moscow Hydro-meteorological School, which existed for five years at Moscow Hydro-meteorological Technical School, 1. The school was located in Leningrad, No. 6-63-64, Nov./Dec. 1955. DWB, DLC—The educational institution is the Moscow Hydro-meteorological Technical School which is the educational institution in the hydro-meteorological service of the U.S.S.R. for training meteorological specialists. During the 25 years of its existence the school produced 1000 specialists; 500 of them during the past two years. Education includes not only the physical sciences but also political indoctrination. Subject Headings: 1. Moscow Hydro-meteorological Technical School. 2. Training in meteorology—U.S.S.R.

SI 590-578

3(1), 9(3)

AUTHORS:

Ryzhkov, Ye.V., Bukhterin, A.Ya., Dymovich, N.D.,
Ivanov, N.I., Markov, Yu. V.

06537
SOV/142-2-2-13/25

TITLE: A Panoramic, Automatic Ionosphere Station

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika,
1959, Vol 2, Nr 2, pp 227-233 (USSR)

ABSTRACT: The paper contains a description of a panoramic, automatic ionosphere station (PAIS - panoramnaya avtomaticheskaya ionosfernaya stantsiya) working in the range of 0.5 - 28 megacycles. The PAIS was developed at the Kafedra antenn i rasprostraneniya radiovoln Leningradskogo elektrotekhnicheskogo instituta svyazi imeni M. A. Bonch-Bruyevicha - LEIS - (Chair of Antennas and Radio Wave Propagation of the Leningrad Electrical Engineering Institute of Communications imeni M.A. Bonch-Bruyevich). This PAIS version was based on an ionospheric station developed and built during the period of 1953-1955 [Ref 1]. In this version, the working range and the transmitter power were increased, the ionogram at the screen of the panoramic indicator

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was improved and a simpler automation was used, satisfying the requirements for the International Geophysical Year. The new version has the following features: 1) Range of operating frequencies 0.5-28 mc. 2) Pulse power 15 kw. 3) Frequency of pulse sequences 50 cycles. 4) Duration of rectangular pulses 100 microseconds. 5) Receiver sensitivity 1 - 2 microvolts at a signal-to-noise ratio not less than 3. 6) The indicator with a linear sweep facilitates observations at any of the working frequencies within 4,000 km. 7) The panoramic indicator facilitates observations up to an altitude of 1,500 km. The scale of the frequency scanning is semilogarithmic. 8) With automatic operation, 15 seconds are required for passing thru the frequency range. 9) Program control facilitates automatic recording of ionograms 1, 2, 4 or 12 times per hour with automatic start-stop of the station. The station may also be operated manually. The authors further describe the block diagram of the station, the master generator, the modulator and the transmitter, the receiver, the indicators, the auto-

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matic controls and the antennas. Impact excitation pulses are shaped in the modulator. These same pulses are also used for starting the indicator scanning and the modulation of the output stages of the transmitter. The voltage with a frequency of 0.5 - 28 mc from the master generator unit is amplified in the transmitter and fed to the antennas. The aforementioned master generator voltage is fed simultaneously to the receiver for performing the electrical coupling of the receiver and transmitter tuning. The receiver works on two IF frequencies, 30 and 29.1 mc. The master generator contains the following tubes: one 6N1P, five 6Zh5P, two 6N15P. The modulator/transmitter unit consists of three 6N1P, one GU-50, one 6P9 and one GMI-83. A ZILLO-33 indicator tube is used. Figure 2 is a general view of the PAIS, while figure 5 shows the transmitter/modulator unit. Presently, the station described in this paper is operated on the test ground of the Leningradskoye otdeleniye Nauchno-issledovatel'skogo instituta zemnogo magnetizma i rasprostraneniya radiovoln (Leningrad Branch of the Scientific Research

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Institute of Earth Magnetism and Radio Wave Propagation).
There are 3 photographs, 4 block diagrams and 3 Soviet
references.

This article was recommended by the
"ifedra antenn i rasprostraneniya radiovoln Leningrad-
skogo elektrotekhnicheskogo instituta svyazi imeni M.
A. Bonch-Bruyevicha (Chair of Antennas and Radio Wave
Propagation of the Leningrad Electrical Engineering
Institute of Communications imeni M.A. Bonch-Bruyevich)

SUBMITTED: September 15, 1958

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IVANOV, N.I.; DULIN, A.A.

Improving the efficiency of glass grinding and polishing operations.
Stek.i ker. 12 no.12:25-27 D '55. (MLRA 9:3)

1. Stekol'nyy zavod "Proletariy".
(Glass manufacture)

S/058/61/000/007/001/086
A001/A101

AUTHOR: Ivanov, N.I.

TITLE: Investigations of Professor S.I. Pokrovskiy on electromagnetic theory of light and optical engineering

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 2, abstract 7A19 ("Uch. zap. Buryatsk. gos. ped. in-t", 1959, no. 17, 99 .. 111)

TEXT: Two studies of S.I. Pokrovskiy are reviewed: "On the nature of magnetic forces (fundamentals of new electrodynamics)" and "On a new method of determining angular diameters of stars by means of elliptical polarization of light". ✓

[Abstracter's note: Complete translation]

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S/058/61/000/012/001/083
A058/A101

AUTHOR: Ivanov, N.I.

TITLE: Prof. A.I. Sadovskiy's investigation of light pressure

PERIODICAL: Referativnyy zhurnal. Fizika, no. 12, 1961, 3, abstract 12A23
(Uch. zap. Buryatsk. gos. ped. in-t, 1960, no. 19, 81 - 102)

TEXT: In 1898, Prof. A.I. Sadovskiy of Yur'yev University submitted his
Doctor's dissertation entitled "Ponderomotive effects of electromagnetic and
light waves on crystals". The present article expounds this work.

[Abstracter's note: Complete translation]

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S/058/51/000/012/002/083
A058/A101

AUTHOR: Ivanov, N.I.

TITLE: Some optical works of P.A. Zilov

PERIODICAL: Referativnyy zhurnal. Fizika, no. 12, 1961, 4, abstract 12A2⁴
(Uch. zap. Buryatsk. gos. ped. in-t, 1960, no. 19, 103 - 120)

TEXT: This is a short survey of the work of Prof. P.A. Zilov of Moscow University on the electromagnetic theory of light, the Zeeman effect, instrumental optics, luminescence and light pressure.

[Abstracter's note: Complete translation]

✓

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IVANOV, N.I.; BULYCHEVA, V.K.

Emergency hospitalization of patients with myocardial infarction in
first aid stations in Moscow. Sovet.zdravookhr. no.2:33-42 Mr-Ap '50.
(GLML 19:2)

1. Of the Moscow First-Aid Station (Head -- Honored Physician RSFSR
Dr. A.S.Puchkov). 2. Three tables included.

BOLGOV, N.F., dotsent; IVANOV, N.I., dotsent; SHISHAKOV, V.A., kand.
pedagog. nauk; RABOTYEVSKII, V.V., prof.; BALIKA, D.A., prof.

Reviews and bibliography. Zem. i vsel. i no.5:90-94
S-0 165. (MIRA 18:11)

IVANOV, N.

"On the Electric Field in Semiconductors during the Passage of Current and the Ejection of Electrons by this Field,"

Zhur. Eksper. i Teoret. Fiz., 11, No. 1, 1941. Physics Faculty, State University
Leningrad, 1940

IVANOV, N.

25317 IVANOV, N. Podotovka telefonno-kakel'noy komandy. Voen. Svyazist,
1948, No. 7, s. 16-19

SO: Letovis'Zhurnal Statey, No. 30, Moscow, 1948

IVANOV, N. I.

AID P - 4240

Subject : USSR/Radio Engineering

Card 1/2 Pub. 90 - 6/8

Author : Ivanov, N. I.

Title : Movement of electrons in the plate-cathode space of a diode when the plate voltage is rapidly changing.

Periodical : Radiotekhnika, v. 11, no. 1, 50-56, Ja 1956

Abstract : The author investigates mathematical formulas for the electronic processes in a diode taking into consideration the influence of the space charge. Equations describing the passage of current through a diode, the cathode of which is capable of an unlimited electron emission, are known and references are given by the author. However, the solution of such equations is highly complicated and can be obtained only with approximate computing methods. The author presents a relatively simple method of numerical integration of the equations of movement of the electrons. The method is not limited by considerations of the velocity of electrons. The author expands his

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Radiotekhnika, v. 11, no. 1, 50-56, Ja 1956

Card 2/2 Pub. 90 - 6/8

numerical integration methods for particular cases to a whole group of such cases on the basis of the theory of similarities. He presents diagrams of electron transit time. The same method also applies to diodes with a cathode having limited electron emission capability. One diagram, 1 table, 7 references (6 Soviet)(1936-1952).

Institution : None

Submitted : My 28, 1955

IVANOV, N.I.; GAPLICHUK, O.M.

Scientific and technical conference on problems of automatic control
and long-distance servicing of intercity communication lines. Vest.
sviazi 17 no.1:15 Ja '57. (MLRA 10:2)

1. Nachal'nik Kiyevskogo oblastnogo upravleniya svyazi, predsedatel'
Ukrainskogo respublikanskogo pravleniya Nauchno-technicheskogo ob-
shchestva radiotekhniki i elektrosvyazi imeni A.S.Popova (for Ivanov).
2. Zamestitel' predsedatelya pravleniya (for Gaplichuk).
(Kiev--Telecommunication--Congresses)

SOV/142-58-5-22/23

8(4)

AUTHORS: Gaplichuk, O.M., Engineer, and Ivanov, N.I., Engineer

TITLE: Scientific-Technical Conference in Kiyev, Dedicated to Radio Day

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - radiotekhnika, 1958, Nr 5,
pp 631-633 (USSR)

ABSTRACT: The Scientific-Technical Conference was convened from April 22 to
April 26, 1958 in Kiyev. The conference was organized by the
Ukrainian Republic Board N.P.O.R. and E. imeni A.S. Popov (Ukrain-
skoye republikanskoye pravleniye NPOR i E Imeni A.S. Popova). The
Conference was inaugurated by the Deputy Minister of Telecommuni-
cation of the Ukr. SSR, A.T. Tsivun and the Chief of Technical Con-
trol for Radio Electronics attached to the State Committee of the
Council of Ministers of the USSR V.A. Govyadinov.

SUBMITTED: May 9, 1958

Card 1/1

AUTHOR: Ivanov, N.

BOV-25-58-7-40/56

TITLE: Fifty Billion Electron Volts (50 milliardov elektronvolt)

PERIODICAL: Nauka i zhizn', 1958, Nr 7, p 69 (USSR)

ABSTRACT: One year ago the Ob'yedinennyi institut yadernykh issledovanii (Joint Institute of Nuclear Research) in Dubna, put the world's most powerful atomic engine (the proton-synchrotron) into operation. At present the Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury (Scientific Research Institute of Electrophysical Apparatus) is creating an even more powerful accelerator of elementary particles. The maximum energy of the new accelerator will amount to 50 billion electron volts. The diameter of the electromagnet will be 0.5 km, the weight approximately 22,000 tons and the capacity of the feeding system approximately 100,000 kw.

1. Accelerators--Development

Card 1/1

IVANOV, N.I., kand. med. nauk

Use of vestibular stimuli for the purpose of normalizing
the function of the vestibular analysor. Zhur. ush., nos. i
gorl. bol. 23 no.1:33-35 Ja-F '63. (MIRA 17:2)

1. Iz kafedry bolezney ukha, gorla i nosa (nachal'nik -
zasluzhennyy deyatel' nauki prof. K.L. Khilov) Voyenno-
meditsinskoy ordena Lenina akademii imeni S.M. Kirova,
Leningrad.

KALACHEV, Yu. A.; IVANOV, N. I.

Polishing of polymethylmethacrylate by oxypropane flame.
Plast. massy no. 5:61 '64. (MIRA 17:5)

DMITRENKO, I.M.; LOGVINENKO, S.P.; IVANOV, N.I.; KOLOT, Z.M.

Thermometric characteristics of semiconductor diodes.

Prib. i tekhn. eksp. 10 no. 5:249-250 S-0 '65.

(MIRA 1961)

1. Fiziko-tehnicheskiy institut nizkikh temperatur AN UkrSSR,
Khar'kov. Submitted July 25, 1964.

ACC NR: AP5027047

SOURCE CODE: UR/0120/65/000/005/0249/0350

AUTHOR: Dmitrenko, I. M.; Logvinenko, S. P.; Ivanov, N. I.; Kolot, Z. M.

ORIG: Physics-Engineering Institute of Low Temperatures, AN UkrSSR, Khar'kov (Fiziko-
tekhnicheskiy institut nizkikh temperatur AN UkrSSR)

TITLE: Thermometric characteristics of semiconductor diodes

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1965, 249-250

TOPIC TAGS: semiconductor diode, temperature characteristic, germanium diode,
gallium arsenide

ABSTRACT: The present note reports on semiconductor diode investigations of fused
gallium arsenide and point germanium (D14A and D9A) diodes in a 2 to 300K temperature
range. Graphs show the temperature and transfer characteristics of experimental low-
ohmic, high ohmic, and commercially available diodes. Results agree with those found in
the literature. During repeated cooling of nonhermetically sealed diodes, the reproducibil-
ity of readings is within 0.05 – 0.1°. Authors acknowledge the help of V. M. Svetlichnyy
and L. A. Zubritskiy in the initial stages of the work. Orig. art. has: 3 figures.

SUB CODE: EC, GP / SUBM DATE: 25Jul64 / ORIG REF: 002 / OTH REF: 002

jw

Card 1/1

UDC: 621.382.21536.53

IVANOV, N.I.

Selecting the projection surface of triangulation in connection
with engineering and geodetic investigations and municipal surveys.
Geod.i kart. no.2:36-39 F '57. (MLRA 10:5)
(Projection)
(Surveying)

BOLGOV, I.F., kand.tekhn.nauk; DONSKIKH, I.Ye., inzh.; IVANOV, N.I., inzh.

Organization of geodetic work for power construction. Energ.
stroi. no.4:8-10 '58. (MIRA 12:2)

1. Institut "Orgenergostroy."
(Geodesy) (Power engineering)

H.B. Entwistle, N.L.

AUTHORS None Given 6-58-5-13/11

TITLE: On the "Compensated" Coordinate System (O "kompensirovannoy" sisteme koordinat)

PERIODICAL: Geodesiya i Kartografiya, 1958, Nr 5, pp. 64-66 (USSR)

ABSTRACT: Letters reached the editor's office which concerned the article by N.I.Ivanov: "On the Selection of the Triangulation-Projection-Surface in Engineer-Geodetic Determinations for City Mapping", which was published in Geodesiya i Kartografiya, 1957, Nr 2. In these letters engineers V.L.Kagan, K.S.Bryakov, docent N.N.Lebedev and the Candidate of Technical Sciences I.F.Bolgov arrive at the common conclusion that the problem raised by the article deserves attention. At the same time, however, V.L.Kagan remarks that, in spite of all its advantages, the suggestion made by Ivanov lacks accuracy. Engineer K.S.Bryakov adds some ideas which render the suggestion made by Ivanov more precise. I.F.Bolgov mentions an example and demonstrates the advisability of applying the "compensated" system in plains and in the case of a great distance between the work area and the axial meridian of the six degree zone. There is 1 table.

Card 1/2

On the "Compensated" Coordinate System

6-58-5-13/17

1. Mapping 2. Geodesics

Card 2/2

BOLGOV, I.P., kand.tehn.nauk.; DONSKIV, I.Ye., inzh.; IVANOV, N.I., inzh.

Organization of periodic observations of deformations of hydraulic
structures. Mater. zhurn. no.6; 19-22 1955. (MIRA 12:11)

1. Institut "Gidroprojekt."
(Hydroproject) (Surveying)

PUZANOV, B.S., kand.tekhn.nauk; IVANOV, N.I., inzh.

Methods for using terrestrial stereophotography in measuring volumes and
surfaces. Trudy Inst. Orgenergostroi no. 1:3-51 '59. (MIRA 14:3)
(Earthwork) (Photographic surveying)

14(6)

SOV/98-59-3-10/17

AUTHORS: Bolgov, I.F., Candidate of Technical Sciences;
and Ivanov, N.I., Engineer

TITLE: Planning the Geodetic Basis for Constructing Large
Hydraulic Installations (Proyektirovaniye geodezicheskoy
osnovy dlya stroitel'stva krupnykh gidrouzlov)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 3, pp
46-48 (USSR)

ABSTRACT: The authors suggest that a geodetic survey map be
added to plans for the construction of large hy-
draulic installations, as it is done presently for the con-
struction of thermal power plants. This will pre-
serve the geodetic point from destruction. It
often has happened that a geodetic survey had to
be made several times (construction of the Tsimly-
skaya and Kuybyshev hydro-power plants), because
the geodetic points were destroyed during the con-
struction of the hydroelectric power plants. The

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Planning the Geodetic Basis for Constructing Large Hydraulic
Installations SOV/98-59-3-10/17

preservation of the geodetic basis is also important
for the observation of the deformation of some struc-
tures, such as dams, buildings of power plants, etc.

Card 2/2

BOLGOV, I.F., kand.tekhn.nauk; DONSKIKH, I.Ye., inzh.; IVANOV, N.I.,
inzh.; MITROFANOVA, G.V., inzh.

Survey of triangulations used in laying out large hydroelectric
developments. Energ. stroi. no.3:79-83 (13), 1960. (MIRA 14:9)

1. Normativno-issledovatel'skaya stantsiya instituta "Orgenergostroy".
(Hydroelectric power stations) (Surveying)

IVANOV, N. I.

Determining inaccessible edges of water in mountain rivers. Geod.
i kart no. 4:45-48 Ap '60. (MIRA 13:8)
(Hydrographic surveying)

BOLGOV, I.F.; IVANOV, N.I.

Geodetic problems in conducting building and assembling operations.
Prom. stroi. 38 no. 12;49-50 '60. (MIRA 13:12)
(Surveying) (Construction industry)

S/006/61/003/002/003/003
B116/B202

AUTHORS: Ivanov, N. I., Puzanov, B. S.

TITLE: Determination of the volume in earth and rock operations from the pairs of stereoscopic pictures obtained by phototheodolite surveying

PERIODICAL: Geodeziya i kartografiya, no. 2, 1961, 36-41

TEXT: The present methods of determining the volume in rock and earth excavations have the following disadvantages: extensive field and indoor work, complicated evaluation of data, generalized and incomplete data. For this reason, the authors developed a method of analytically determining the volume and areas from the pairs of stereoscopic pictures of phototheodolite surveying without plans or profiles. The studies were made at the nauchno-issledovatel'skiy sektor Vsesoyuznogo instituta "Orgenergostroy" (Scientific Research Section of the All-Union Institute "Orgenergostroy"). In this method the simplest up-to-date instruments of terrestrial stereophotography are used: a phototheodolite and a stereocomparator. To determine the volume, the object concerned must be

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Determination of the volume...

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periodically photographed from permanently marked base points. When determining the volume of earth heaps or other immobile objects, photographs must be taken from two opposite sides. In the case of ordinary surveying where the optical axis of the phototheodolite is oriented horizontally and normally to the base line the photogrammetric coordinates of the field points are determined from the ordinary formulas (Fig. 1). The authors developed two methods of evaluating the pairs of stereoscopic pictures for a direct determination of the volume: 1) method of horizontal network and 2) method of vertical network. Field work and laboratory work are the same in both cases. They consist in the following: selection, marking, and measuring of the base points, photographing and development of the negatives. Indoor work to be done in the first method: 1) Assumption of the dimensions of the sides of the square or rectangle in nature (e.g. 10, 20 m), determination of the distances, Y_ϕ (Fig. 1) and of the abscissae of the points of the network. The coordinates in the system of the picture are then determined from formulas $Y_\phi = B/p \cdot f$ and $X_\phi = B/p \cdot x_L \cdot x_L$ and z_L are the coordinates of the point on the left

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Determination of the volume ...

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picture of the pair (in mm), $p = x_R - x_\eta$ is the horizontal parallax (in mm), x_η is the abscissa of the points on the right picture of the pair (in mm), B is the length of the base line (in m), f is the focal length of the phototheodolite camera, Y_ϕ , X_ϕ' , and Z_ϕ are the photogrammetric coordinates of the terrain points (in m). 2) The z_R coordinates for all angles of the square network are measured by the stereocomparator, and the calculated values of the parallaxes and the abscissæ are entered in a table. 3) By means of formula $Z_\phi = B/p \cdot z_R$ the z_R values are converted to the Z_ϕ values in the terrain. The work mentioned in points 2) and 3) are made with two pairs of stereoscopic pictures, before and after the excavation and deposition, respectively. The working volume in the region of each square (or rectangle) is obtained from formula $V = sh$. s - area of the square, h - mean working quote which was obtained from the quotes of four square vortices with the working quote of each square vortex being equal to the difference of the heights

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Determination of the volume . . .

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determined before and after excavation. The second method of the "vertical network" is used when the mining place can be projected to the plane which is perpendicular to the optical axis of the camera. In this method the following indoor work is necessary: 1) the dimension of the network element (in mm) is assumed, the parallaxes for all points of these elements are determined by the stereocomparator, 2) without passing to the coordinates of the terrain, the volume of each element is determined from formula (7) or from the weighted means of the parallaxes from formula

$$V = \frac{QN \Delta p_{cp..n.}}{(p_{cp..n.} \cdot p'_{cp..n.})^2} \left\{ 1 + \frac{\Delta p_{cp..n.}^2}{3p_{cp..n.} \cdot p'_{cp..n.}} \right\}. \quad (8)$$

$$p_{cp..n.} = \frac{[rp]^{L_1}}{[r]^{L_1}}; \quad p'_{cp..n.} = \frac{[rp'_{cp..n.}]^{L_1}}{[r]^{L_1}};$$

L denotes the number of all points, r - their weight. If the amplitude of parallax variations exceeds 10%, calculations have to be made stepwise when using formula (8). V is determined from formula

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$$v_0 = \Delta x \Delta z B^3 f \frac{p_0 - p'_0}{(p_0 p'_0)^2} \left\{ 1 + \frac{(p_0 - p'_0)^2}{3p_0 p'_0} \right\}. \quad (6)$$

Determination of the volume ...

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N - number of the volume elements, $Q = \Delta x \cdot \Delta z \cdot B^3 \cdot f$, Δx and Δz are the dimensions of the sides of the element (square or rectangle) on the picture negative on the x or z-axis. B is the length of the base line, f the focal length of the phototheodolite camera, p_o and p'_o are the arithmetic means from the parallaxes of the four points of the network element (obtained by taking two successive photographs). The index of p in formula (8) denotes the weighted mean. 3) The areas of the incomplete elements and their volumes were separately determined from the outline of the mining place. The methods given here were tested in the open mine of the Kuybyshevgidrostroy, the Bratsk GES, the Votkinsk GES (GES Hydraulic Power Plant). The mean error was about 1%, and, compared with the ordinary methods, time consumption could be reduced by 2-4 times. There are 2 figures.

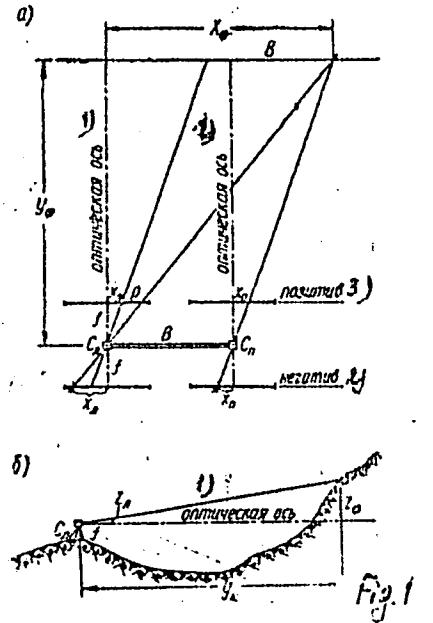
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Determination of the volume...

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Legend to Fig. 1:

- 1) optical axis, 2) negative,
- 3) positive.



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VINOGRADOV, V.S., inzh.; IVANOV, N.I., inzh.

Use of ground-level stereophotogrammetrical surveying in
construction of the Votkinsk Hydroelectric Power Station. Gidr.
stroi. 32 no.3:14-16 Mr '62. (MIRA 16:7)

(Votkinsk Hydroelectric Power Station--Photographic surveying)

IVANOV, N.I.

Some remarks on planning junctions in mining. Ugol' 29 no.11:32-33
'54. (MIRA 7:11)

1. Filial Yuzhgiproshakhta.
(Coal mines and mining)

IVANOV, N. I.

"The Effect of Basic Technological and Natural Factors on
the Laboriousness of Excavating Rock by Cutting Vertical Shafts."
Cand Tech Sci, Moscow Mining Inst imeni I. V. Stalin, Min of Higher
Education, USSR, Moscow, 1955. (KL, No 9, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions
(14)

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 266 (USSR) 15-57-10-14929

AUTHOR: Ivanov, N. I.

TITLE: The Change in Productive Capacity of the Pneumatic
Loader BCh-1 in Relation to the Setting Distance
(Distance Between the Points of Engaging the Rock and
the Buckets) *[Izmeneniye proizvoditel'nosti pnevmo-*
gruzchika BCh-1 v zavisimosti ot rasstoyaniya podtya-
givaniya (rasstoyaniye punkta zakhvata porody ot bad'i)]

PERIODICAL: Nauch. tr. po vopr. gorn. dela. Mosk. gorn. in-t, 1956,
Sb 16, pp 291-297

ABSTRACT: The loading of rock at the face of a mine shaft occupies
from 50 to 60 percent of the expense of the working
force used for the entire process of rock extraction.
At present, the pneumatic clam-shell loader BCh-1 is
used for mechanical loading of rock in the shaft, and
the labor of sinking the shaft has been decreased 27

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The Change in Productive Capacity (Cont.)

15-57-10-14929

percent. To determine to what degree the setting distance affects the productive capacity of the pneumatic loader BCh-1 during sinking of a shaft a study was made of shaft-sinking equipment at the foremost examples of shaft-sinking in the Donets Basin at the Mushketovskaya-Vertikal'naya, Chaykino-Glubokaya, Ignat'yevskaya, and Vetka-Glubokaya shakhty (mines) (diameter of shafts ranging from 6 m to 9.2 m). The buckets used had capacities of 1 m³, 1.5 m³, and 2 m³. The study showed that the maximum productive capacity in loading by the BCh-1 was obtained when the axes of the hoist buckets were symmetrically disposed relative to the axis of the shaft. It was concluded that one of the ways of increasing the productive capacity of the pneumatic loader BCh-1 is to establish conditions for its operation so that the setting spacing does not exceed two meters. The disposition of the shaft-sinking equipment along the area of the face of the shaft should be planned with full consideration of this demand.

Card 2/2

V. M. Yermolayev

IVANOV, N.I., kandidat tekhnicheskikh nauk.

Time-consuming tasks and labor productivity of shaft sinking
dependent upon the cross-sectional area and the VV cartridge
diameter. Ugol' 31 no.10:26-28 o '56. (MIRA 9:11)
(Shaft sinking)

IVANOV, Nikolay Ivanovich; OZHOGIN, I.I., otvetstvennyy red.; IL'INSKAYA, G.M., tekhn.red.; NADEINSKAYA, A.A., tekhn.red.

[The coal industry; a guidebook] Ugol'naia promyshlennost'; putevoditel'.
Moskva [Ugletekhizdat, 1957] 178 p. (MIRA 11:1)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka, 1956.
(Moscow--Coal mining machinery--Exhibitions)

GRAMMATIKOV, Aleksandr Nikolayevich; IVANOV, Nikolay Ivanovich; GRIBIN,
G.P., otv.red.; OSTROVSKIY, I.I., otv.red.; SUROVA, V.A., red.
izd-va; SABITOV, A., tekhn.red.

[Organization and planning of construction in the mining
industry] Organizatsiya i planirovanie stroitel'stva gornykh
predpriatii. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu
delu, 1960. 399 p. (MIRA 13:9)
(Mining engineering)

IVANOV, N.I.

BU-1 rotary-percussion boring machine. Ugol' Ukr. 4. no.2:
26-27 F '60. (MIRA 13:6)
1. Tsentral'nyy nauchno-issledovatel'skiy institut Podzemehakhto-
stroy. (Boring machinery)

IVANOV, N.I., kand.tekhn.nauk

Improve the coefficient of using bore holes. Shakht. stroi. 4 no.4:
5-7 Ap '60. (MIRA 13:11)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Boring) (Shaft sinking)

IVANOV, N.I.

The BU-1 rotary percussion-drilling unit. Biul.tekh.-okon.inform.
no.6:3-4 '60. (MIRA 13:8)
(Boring machinery)

IVANOV, N.I., inzh.

Results of the operational testing of the Bu-1 rotary percussion
drill. Shakht. stroi. 4 no. 6:23-25 Je '60. (MIRA 13:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut
podzemnukhtostroy.
(Boring machinery--Testing)

IVANOV, N.I., kand.tekhn.nauk; SOCHINSKIY, V.P., gornyy inzh.

Efficient systems for opening up new levels in operative Donets Basin mines working flat seams. Ugol' Ukr. 4 no.8:19-24 Ag '60.
(MIRA 13:9)

1. Donetskij ugol'nyy institut.
(Donets Basin—Coal mines and mining)

IVANOV, N. I., kand.tekhn.nauk

Economic effectiveness of speeding up the construction and reconstruction of mines. Shakht. stroi. 4 no.10:9-13 O '60.
(MIRA 13:11)

1. Donetskij ugol'nyy institut.
(Coal mines and mining)

IVANOV, N.I., kand.tekhn.nauk; SHTEDING, A.E., kand.tekhn.nauk

Basic trends and technological developments in the reorganization
of coal mines in foreign countries. Ugol' Ukr. 5 no.5:41-43 My '61.
(MIRA 14:5)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Coal mines and mining)

IVANOV, N.I., kand.tekhn.nauk; SOCHINSKIY, V.P., inzh.; KAGANSKIY, M.Ye.,
inzh.; ZYKOV, V.M., inzh.

Efficient methods of developing new levels in the operative
Donets Basin mines mining flat seams. Sbor.DonUGI no.21:3-35
'61. (MIRA 15:6)
(Donets Basin--Coal mines and mining)

IVANOV, N.I., kand.tekhn.nauk; ZYKOV, V.M., inzh.; KAGANSKIY, M.Ye., inzh.

Some cost indices for operative mines and mines under reorganization. Sbor.DonUGI no.21:89-99 '61. (MIRA 15:6)
(Donets Basin--Coal mines and mining--Costs)

IVANOV, N.I., kand.tekhn.nauk; SOCHINSKIY, V.P., inzh.

Selecting the method of deepening the vertical shafts of operative
Donets Basin mines mining flat seams. Sbor.DonUGI no.21:139-166
'61. (MIRA 15:6)

(Donets Basin--Shaft sinking)

IVANOV, N.I.; SHTEDING, A.E.; Prinimali uchastiye: ZYKOV, V.M., inzh.;
BEREZNIITSKIY, I.I., inzh.; NORENKO, N.A., inzh.; SOCHINSKIY, V.P.,
otv. red.; NURMIUKHOMEDOVA, V.F., red. izd-va; PROZOROVSKAYA, V.L.,
tekhn. red.

[Reorganization of coal mines] Rekonstruktsiya ugol'nykh shakht.
Moskva, Gos.snauchno-tekhn.izd-vo lit-ry po gornomu delu. Pt.1.
[Practices of foreign countries in the reorganization of coal
mines] Zarubezhnyi opyt rekonstruktsii shakht. 1961. 222 p.

(MIRA 15:1)

(Coal mines and mining)

IVANOV, N.I.

BU-1 rotary-percussion drilling rig. Vzryv. delo no.46/3:219-224
'61. (MIRA 15:1)
(Boring machinery)

IVANOV, N.I., kand.tekhn.nauk

Effect of the technical and economic indices on the selection
of the optimum depth of boreholes. Ugol' Ukr. 6 no.1:15-17
Ja '62. (MIRA 15:2)
(Shaft sinking)

IVANOV, N.I., kand.tekhn.nauk

Justification of the economic evaluation induces of variant
solutions in connection with the reorganization and construction
of coal mines. Ugol' 37 no.3:41-43 Mr '62. (MIRA 15:2)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut.
(Mining engineering--Costs)

IVANOV, N.I., kand. tekhn. nauk; KAGANSKIY, M.Ye., inzh.; DZYUBA, Yu.S., inzh.

Effect of concentrating production on the operating indices of
mines. Sbor. DonUGI no.29:67-80 '63. (MIRA 16:10)

(Coal mines and mining—Management)

ROGALEV, V. I.; IVANOV, N. I.; RUBAN, V. A.

Efficiency of over-all mechanization and automatic control of
the "Donetskaia" Mine of the Chistyakovatratsit Trust. Ugol'
38 no.4:46-48 Ap '63. (MIRA 16:4)

1. Zamestitel' glavnogo inzhenera shakhty "Donetskaya" tresta
Chistyakovatratsit (for Rogalev). 2. Donetskiy nauchno-
issledovatel'skiy ugol'nyy institut (for Ivanov, Ruban).

(Donets Basin—Coal mining machinery)
(Automatic control)

SKALYGA, Yu.M., inzh.; IVANOV, N.I., kand. tekhn. nauk; NORENKO, N.A., inzh.

Economic efficiency of general mechanization and automatic control at Gorskaiia Mine No. 1-2. Ugol' 38 no.6:45-47 Je '63.
(MIRA 16:8)

1. Proyektno-konstruktorskaya gruppa shakhty No.1-2 "Gorskaya" tresta Pervomayskugol' (Donbass) (for Skalyga). 2. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut (for Ivanov, Norenko).

(Donets Basin—Coal mining machinery)
(Automatic control)

SHTEDING, A.E., kand.tekhn.nauk; IVANOV, N.I., kand.tekhn.nauk

Methodology for determining the level of mechanization and automatic control of labor and the use of nonmechanized labor in coal mines. Sbor. DonUGI no.28:30-50 '62. (MIRA 16:8)
• (Coal mines and mining—Labor productivity)

SKOROKHODOV, N.Ye., prof. otv. red.; AGAPOV, V.F., prof. po nauchnoy rabote, dots., red.; BOYARSHINOV, M.I., prof., red.; VSELOVSKAYA, Ye.S., red.; GAGEN-TORN, A.V., red.; GOL'DSHTEYN, N.A., red.; IVANOV, N.I., kand. tekhn. nauk, dots., red.; KORZH, P.D., prof., red.; PETROV, V.M., dots. kand. tekhn. nauk, red.

[30 years of the Magnitogorsk Mining and Metallurgical Institute] XXX let MGMI. Magnitogorsk, 1962. 170 p.
(MIRA 17:3)

1. Magnitogorsk. Gorno-metallurgicheskiy institut.
2. Sekretar' partiyogo byuro Magnitogorskogo gorno-metallurgicheskogo instituta (for Petrov).
3. Dekan metallurgicheskogo fakul'teta Magnitogorskogo gorno-metallurgicheskogo instituta (for Ivanov).
4. Zaveduyushchiy kafedroy fiziki Magnitogorskogo gorno-metallurgicheskogo instituta (for Korzh).
5. Zaveduyushchiy kafedroy obrabotki metallov davleniye. Magnitogorskogo gorno-metallurgicheskogo instituta (for Boyarshinov).

IVANOV, N.I., kand.tekhn.nauk

Establishing standard coefficients for evaluating the economic efficiency of construction, reconstruction, and over-all mechanization of mines. Shakht. stroi. 7 no.4:4-6 Ap '63. (MIRA 16:3)

1. Donetskij nauchno-issledovatel'skiy ugol'nyy institut.

MAL'TSEV, Yu.K., inzh.; IVANOV, N.I., kand. tekhn. nauk; ISAYEV,
M.M., inzh.

Reconstruction of Chapaev Mine No. 2 of the "Frunzeugol'"
Trust. Shakht. stroi. 7 no.8:24-25 Ag '63. (MIRA 16:11)

1. Shakhta No. 2 imeni Chapayeva (for Mal'tsev). 2. Donetskiy
nauchno-issledovatel'skiy ugol'nyy institut (for Isayev).

Ivanka, Liza, Kent, British India; J. D. S., Liza, China; etc., etc.

Economic efficiency of the overall administration of production of
ferrous Badin mines and ways of increasing it, Chur. Ching. no. 35:
30-65 16A. (MKA 17:11)

IVANOV, M. I., cand. techn. nauk; MITIN, V. I., math.

Reorganization of Donets basin mines and ways of increasing their efficiency. Ukr. Donb. no.33:78-86. 1986.

(QAM 17:11)

IVANOV, N.I.; DZYUBA, Yu.S.; NORENKO, N.A.; YEVDOKIMOV, F.I.; ARABADZHEV,
A.M.; MEL'NIKOV, V.I.

Efficiency of overall mechanization in Donets Basin mines.
Biul.tekh.ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn.
inform. 17, no. 19, 1964, p. 0 '64. (MIRA 18:4)

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Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 60 (USSR)

AUTHORS: Glinkov, M.A., Ivanov, N.I.

TITLE: A Recirculation Method of Oxygen Use in Large Open Hearths
(Retsirkulyatsionnyy metod primeneniya kisloroda v bol'-
shegruznykh martenovskikh pechakh)

PERIODICAL: V sb.: Primneniye kisloroda v metallurgii. Moscow,
Metallurgizdat, 1957, pp 255-284

ABSTRACT: An investigation is made of the operation of a 185-t open-hearth furnace (OH) with O₂ employed by a recirculation method (RM) consisting of supplementary heating of the OH at various periods during the heat by fuel burnt in a blast highly enriched by O₂ (as much as 80-100%), the fuel and the blow being delivered to the melting chamber of the OH through both checker ports simultaneously. All other conditions being equal, heating from both sides makes it possible to increase the total heat intake of the bath by 19-20%, while a high level of enrichment of the blast by oxygen makes for a sharp reduction in thermal load on the outgoing side of the furnace. Thus, when the blow is enriched 40%, and the thermal load at the valve is

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